

Claims:

1. A wheel assembly that is arranged to support a load carrying platform and to roll on a surface, comprising:

5 a generally planar primary wheel that is rotatable about a central axis, said primary wheel comprising at least one planar member, said planar member having an even number of, but at least four, stub axles at fixed locations extending perpendicularly therefrom, said locations being angularly equidistant apart and equidistant as well from the central axis; and

10 an even number of secondary wheels, one wheel mounted on each stub axle, said secondary wheels being of equal size and configured as a generally cylindrical disk having a diameter greater than the distance between angularly adjacent stub axles, said axles and wheels arranged such that at least two angularly adjacent wheels are in rolling contact with said surface at any one time, each of said secondary wheels arranged to freely rotate independently of any other
15 secondary wheel, and independently as well of said primary wheel, said wheels positioned along their respective axles in a manner causing each wheel of an angularly adjacent pair of wheels that is in contact with said surface to roll along a separate and parallel track.

20 2. The wheel assembly according to claim 1 wherein said primary wheel comprises two parallel planar members that are fixed apart a distance greater than twice the width of a secondary wheel, said members supporting a plurality of axles, one axle for each secondary wheel.

25 3. The wheel assembly according to claim 2 wherein said axles are stub axles that extend inwardly from said parallel planar members, said axles arranged such that the first of any two adjacent secondary wheels is supported by an axle fixed to one of said parallel planar members, and the second of any two adjacent secondary wheels is supported by an axle fixed to the other of said parallel planar
30 members.

4. The wheel assembly according to claim 1 having six secondary wheels.

5. The wheel assembly according to claim 1 having eight secondary wheels.

5 6. The wheel assembly according to claim 1 wherein said primary wheel comprises a single planar member.

7. The wheel assembly according to claim 6 wherein a spacer means is mounted adjacent to said planar member on alternate axles, said spacer means
10 being greater in length than the width of a secondary wheel, whereby adjacent wheels overlap but do not interfere one with the other.

8. The wheel assembly according to claim 7 wherein said spacer means comprises a boss extending from one side of alternate secondary wheels.
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9. The wheel assembly according to claim 6 having six secondary wheels.

10. The wheel assembly according to claim 6 having eight secondary
20 wheels.

11. A wheel and brake assembly that is arranged to support a load carrying platform and to roll on a surface, comprising:

a caster that is rotationally mounted between the arms of a yoke, said yoke
25 cantilevered from a pivot member that is attached to a mounting bracket arranged to support a load bearing platform so that a downward pressure exerted on said pivot member causes said yoke and caster to rise relative to said pivot;

resistance means to oppose the movement of said yoke; and

brake means arranged to stop rotation of said castor upon movement of
30 said yoke in opposition to said resistance through application of a pre-determined pressure on said pivot.